

REMARKS/ARGUMENTS

Claim 14 has been amended to further clarify that a touch position is estimated based on the modified sensed signals as affected by the first and second sinusoidal signals, wherein the first sinusoid signal is 90 degrees out of phase with the second sinusoidal signal.

More particularly, claim 14 recites: a plurality of sensors coupled to the plurality of electrodes and configured to: (a) receive both the sensed signals and the first and second sinusoidal signals, wherein the first sinusoid signal is 90 degrees out of phase with the second sinusoidal signal, and (b) generate, based on said first and second sinusoidal signals, modified sensed signals indicative of signals flowing from each electrode of the plurality of electrodes as modified by the first and second sinusoidal signals (see, for example, Figure 17 of the above-identified application).

In the Office Action, the Examiner has rejected claims 14-18 under 35 U.S.C. 102(b) as being anticipated by or obvious under 35 U.S.C. 103(a) in view of the U.S. Patent No. 6,476,798 (*Bertram et al.*). The Examiner's rejection is fully traversed below.

More particularly, the Examiner has asserted that *Bertram et al.* teaches a sinusoid generator adapted to generate a sinusoidal signal having a frequency based on the clock frequency (Office Action, page 6, citing col. 4, lines 17-27 of *Bertram et al.*)

It is noted that *Bertram et al.* states:

"When the touch screen is provided with an electric potential at the electrodes 102a, 102b, 102c, 102d, under normal (non-touch) circumstances, the potential that the electrodes will remain constant in time. When a human touches a portion of the screen, such as with a finger, a small amount of current, such as about 5-10 .mu.amp per volt of driving potential will flow through the human's body to ground. The apparatus of FIG. 4 is intended to provide a signal from which the value of the current from one of the electrodes through the human body to ground, can be measured in a relatively noise-free manner." [*Bertram et al.*, col. 4, lines 17-27]

However, contrary to the Examiner's assertion, it is respectfully submitted that the electrodes 102a, 102b, 102c and 102d of the apparatus shown in FIG. 4

of *Bertram et al.* do not teach providing a sinusoidal signal. Accordingly, it is respectfully submitted that the Examiner's rejection is improper and should be withdrawn.

It is further noted that *Bertram et al.* states:

“In one embodiment, the signal provided to the electrode 102a (via resistors 430, 432) as well as provided to the negative input of the OP amp 418 (via resistors 434, 436) has a generally sinusoidal form provided at a frequency such as 10 kilohertz 438. Similar circuitry is used to provide signals to (and samples signals at) the other electrodes 102b, 102c, 102d, although the phase of the four signals are preferably offset 90.degree.” [*Bertram et al.*, col. 4, lines 55-62]

However, it is respectfully submitted that providing a sinusoidal signal to an electrode does not teach or suggest:

a plurality of sensors coupled to the plurality of electrodes and configured to:

(a) receive both the sensed signals and the first and second sinusoidal signals, wherein the first sinusoid signal is 90 degrees out of phase with the second sinusoidal signal; and

(b) generate, based on said first and second sinusoidal signals, sensed signals indicative of signals flowing from each electrode of the plurality of electrodes.

Accordingly, it is respectfully submitted that claim 14-18 are patentable over *Bertram et al.* at least for these reason.

Based on the foregoing, it is submitted that the claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed because the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner.

Applicant hereby petitions for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. IGT1P212). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
BEYER WEAVER LLP

/RMahboubian/
Ramin Mahboubian
Reg. No. 44,890

P.O. Box 70250
Oakland, CA 94612-0250
(408) 255-8001